

HIGHER LAYER	<u>240</u>
ATM ADAPTATION LAYER (AAL) <u>230</u>
ATM LAYER	<u>220</u>
PHYSICAL LAYER	<u>210</u>

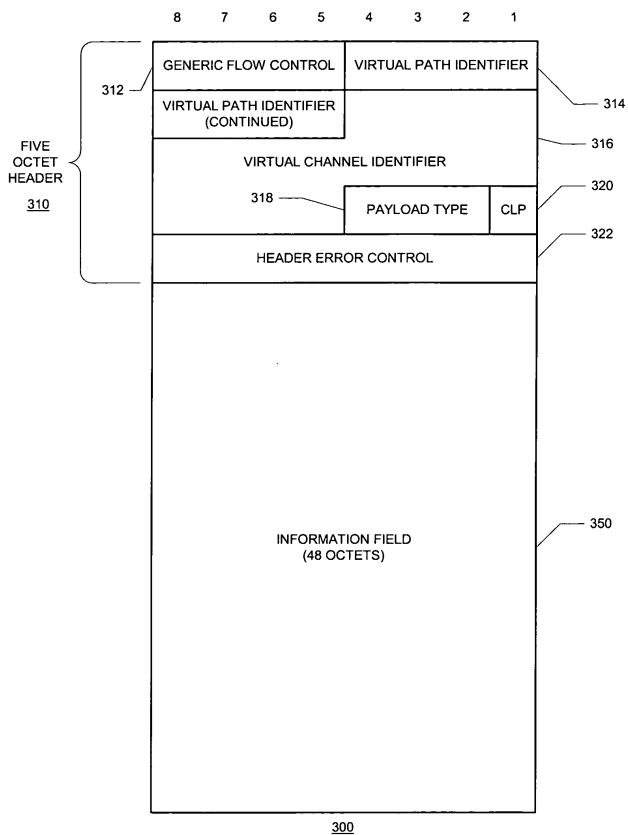
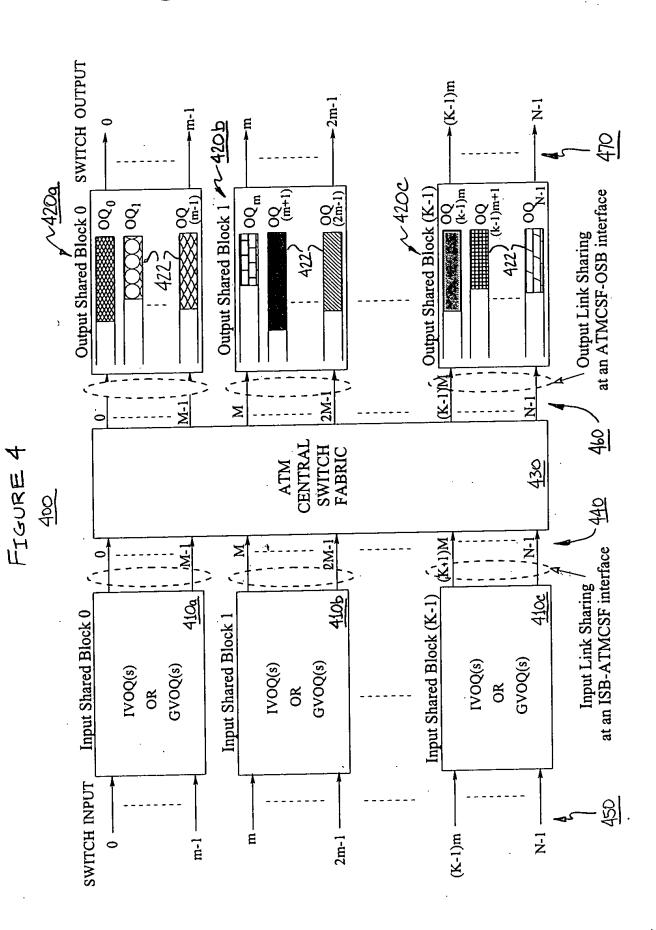


FIGURE 3A

FIGURE 3B



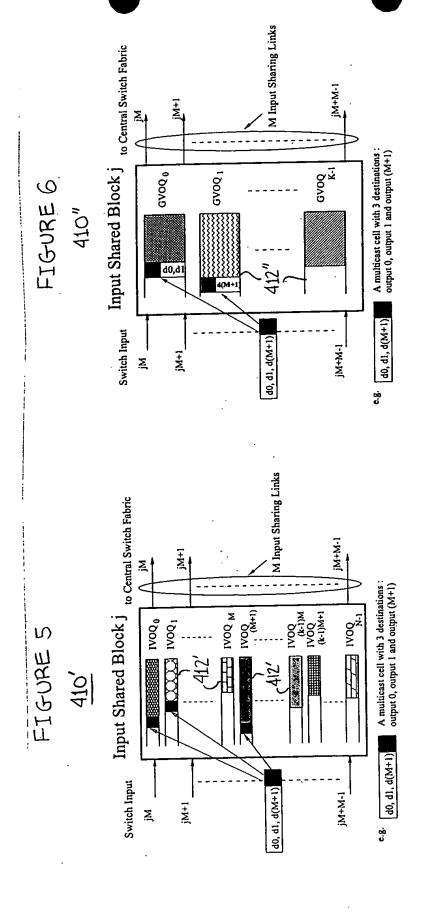
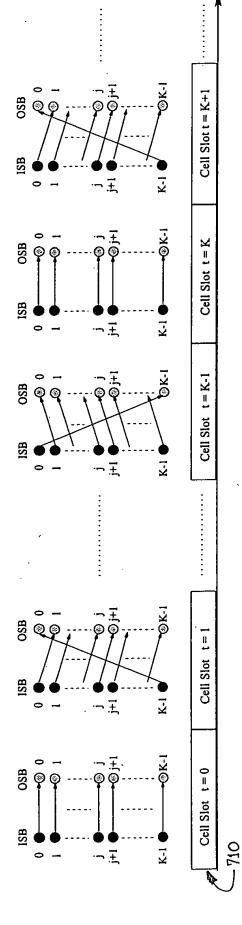
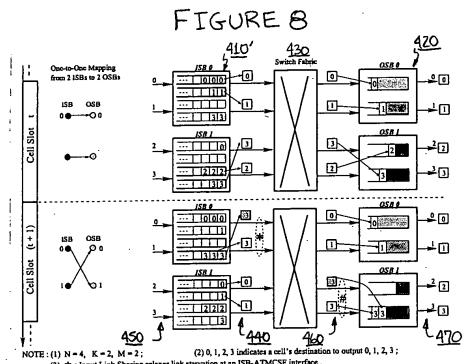


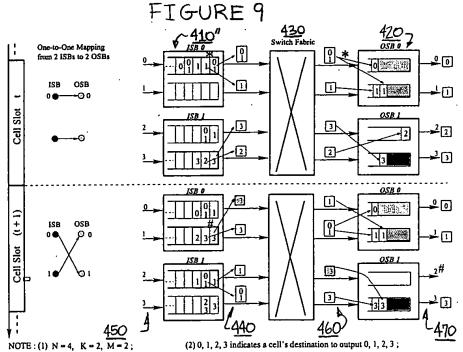
FIGURE 7



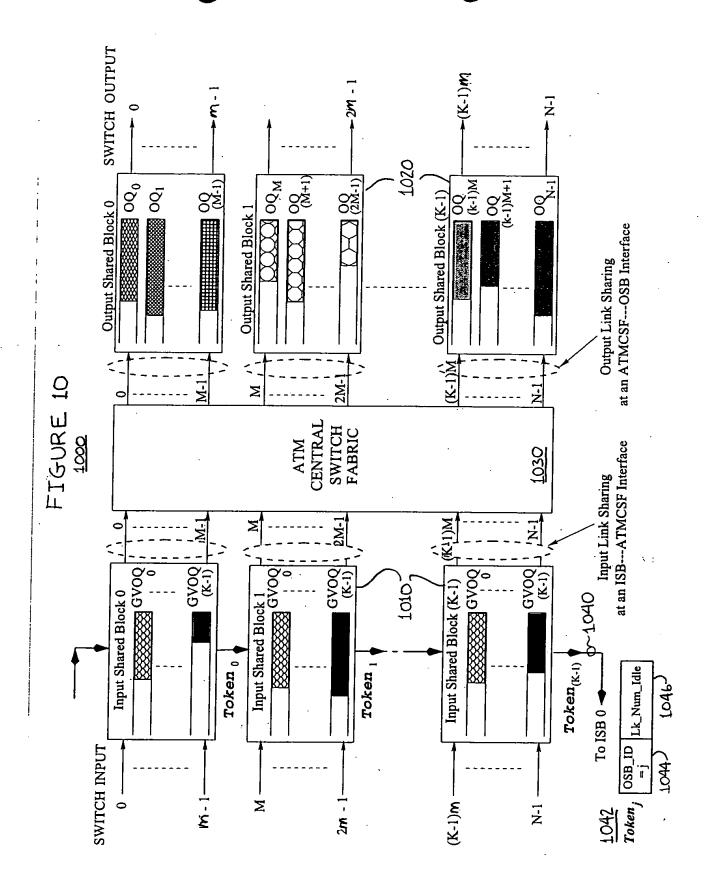


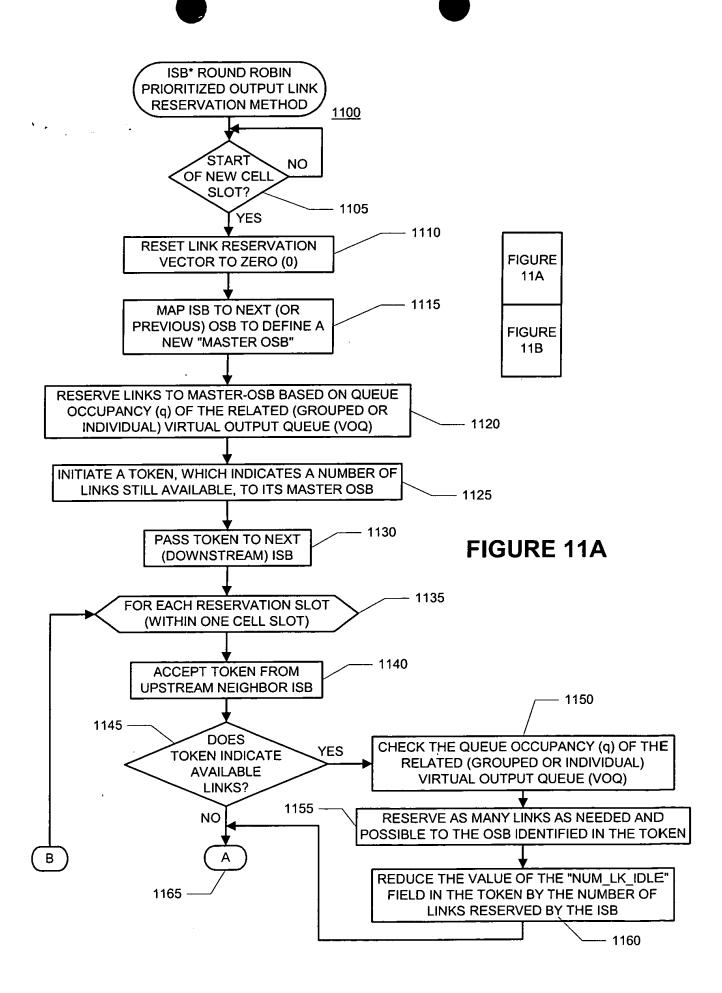
(3) *: Input Link Sharing relaxes link starvation at an ISB-ATMCSF interface.

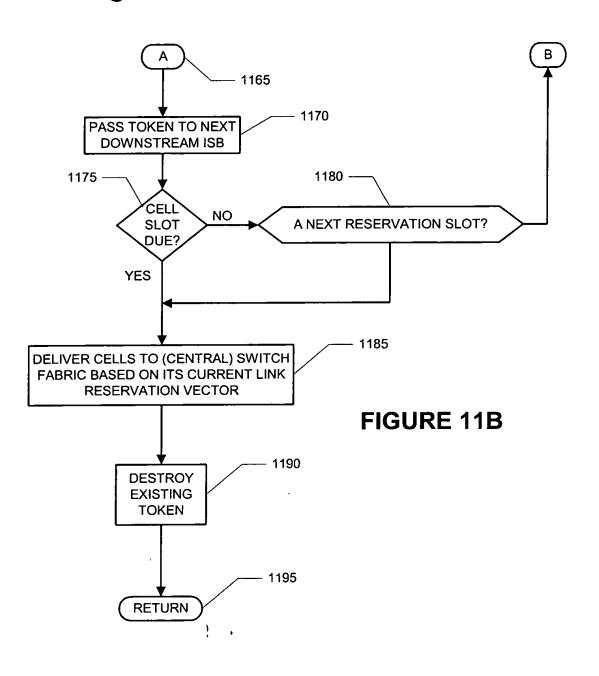
(4) #: Output Link Sharing eliminates speedup requirement in central switch fabric; ATMCSF needs to keep cell sequence.



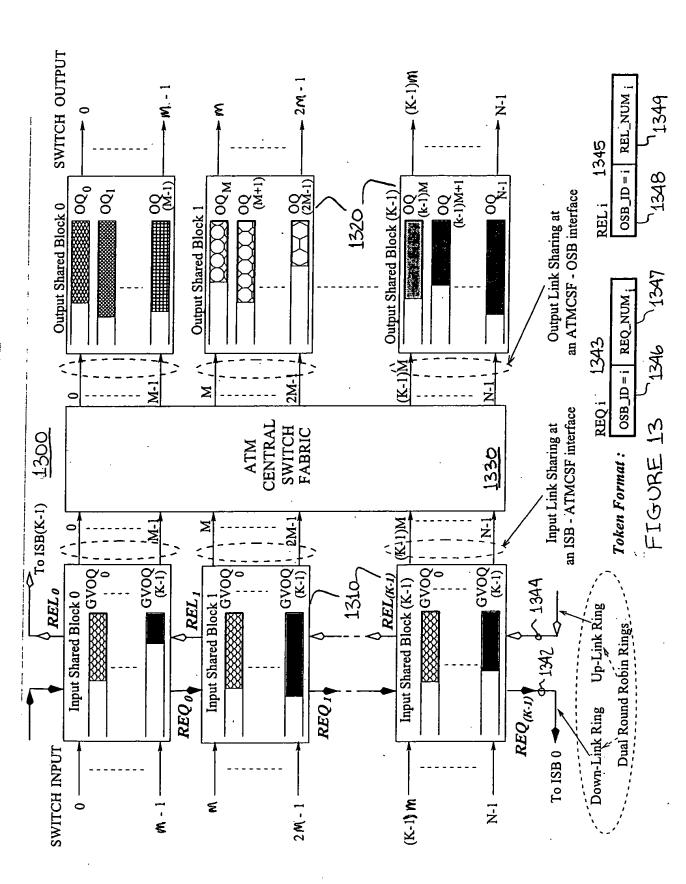
(3) * : Advantages of GVOQ, i.e. scheduling is simpler, many cell copies are forwarded. (4) # : Disadvantage of GVOQ, i.e. the cell going to output 2 is blocked by two cells destined to output 3.

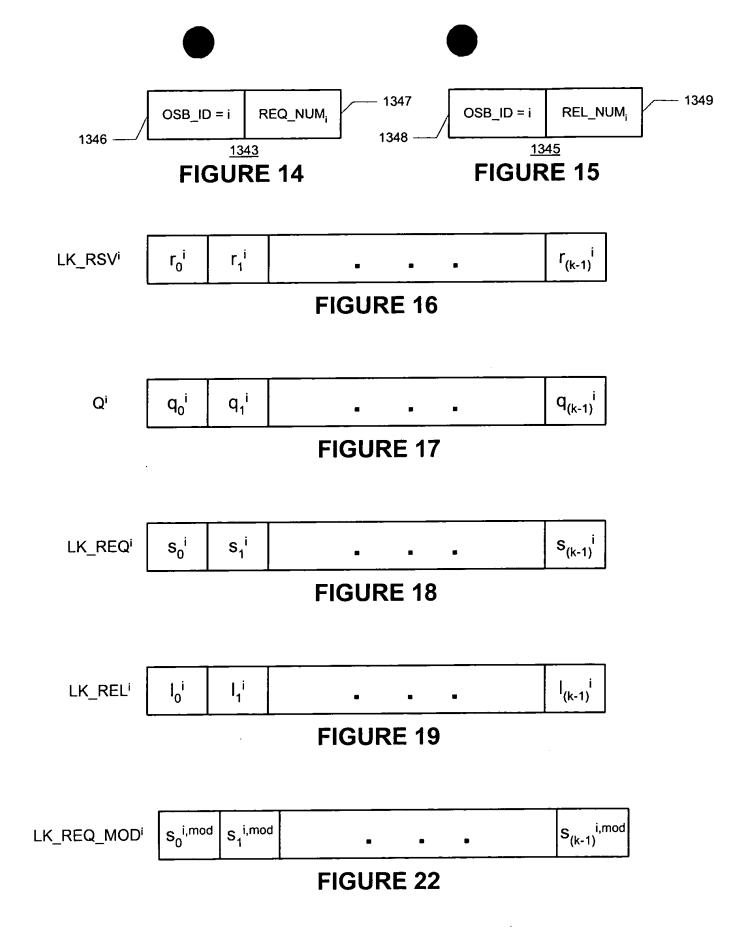






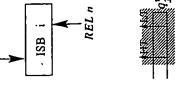
 $K-1
ightharpoonup [0, ..., r_{k-3}^{k-1}, r_{k-2}^{k-1}, r_{k-1}^{k-1}]$ Token (j-1) (j-1)Token (k-1) \downarrow [$r_0^1, r_1^1, 0, \dots, 0, r_{k-1}^1$] Token (k-1) t_0^0 , 0, t_{k-1}^0 Token (k-2) t_0^0 , 0, t_{k-2}^0 , t_{k-1}^0 Token $0 \downarrow [r_0^1, r_1^1, \dots, 0]$ $r_{k-2} = r_{k-1} = [0, \dots, r_{k-2}^{k-1}, r_{k-1}^{k-1}]$ Rsv_Slot 2 Cell Slot t = 0 $Token I \oint [0, r_1^1, \dots 0]$ ISBs link reservation vector(s) One-to-One Mapping in cell slot 0 OSBs 9 ISBs K-1





(
Ĺ	IJ
-	アフ
	5
	L

	$courses Occupancy q_1^* < ET (areal Politicad)$	Queue Occupancy LT < g; < HT; (area?: normaliload);	Queue Occupancy High Service High Service (area 3. Beavy load)
Operations Upon Receiving REQ j	the i^{th} ISB will request 0 extra link to the j^{th} OSB ;	o the j^{th} OSB ;	the i^{th} ISB will request 1 extra link to the j^{th} OSB;
200	if $((REQ_NUM_j > 0) \text{ and } (r_j^* > 0))$	if ((REQ_NUM,	if ((REQ_NUM _j > 0) and $(r_j^* > Fair)$)
	the ISB will release a link for OSB j;	the ISB will	the ISB will release a link for OSB j ;
Operations Upon Receiving REL n		$r_i^i < M$) , an extra link to the n^{th}	OSB)
0	the i^{th} ISB take a link from REL_n token;	$L_{ m n}$ token ;	



	IF	[*		THEN
	q_j^i	$s_j^{i,old}$	S_j^i	REQ_NUM,
case 1	. En /	0	1	In Step 3, REQ_NUM, ++;
case 2	7 111	1	1	REQ_NUM,
case 3		0	0	REQ_NUM,
case 4	≥ HT	, .	if (REQ. $s_j^i = 0$	5 2
			3j-1	-

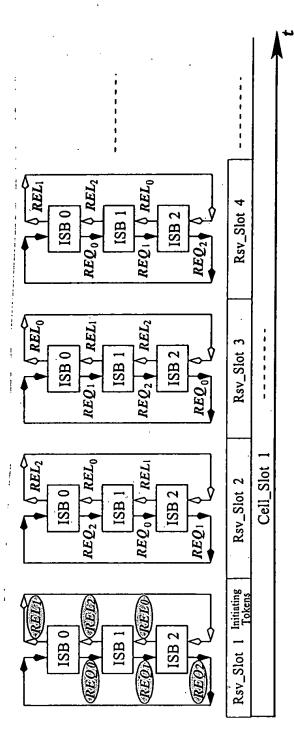
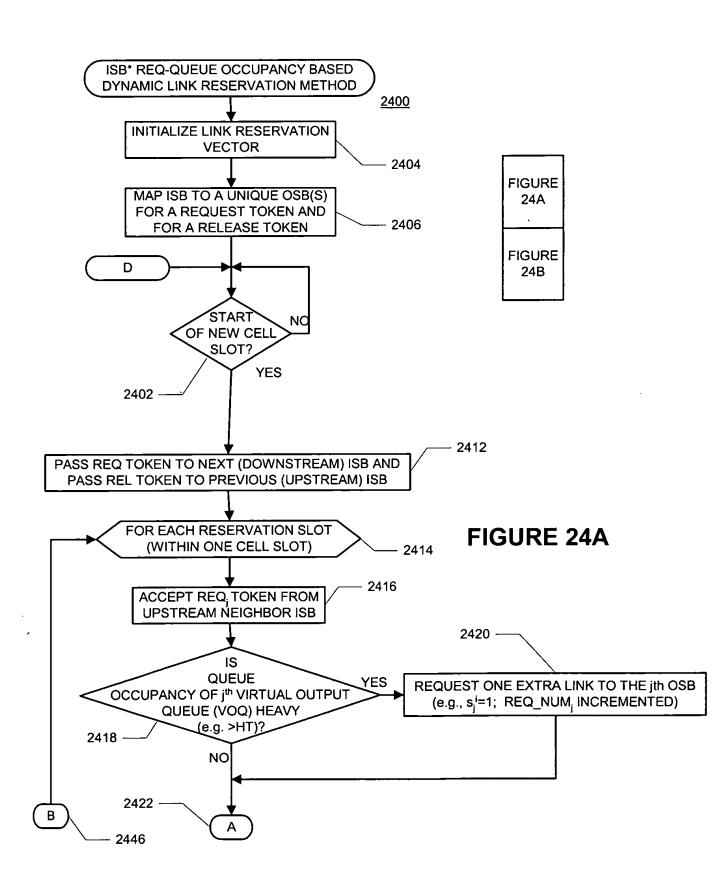
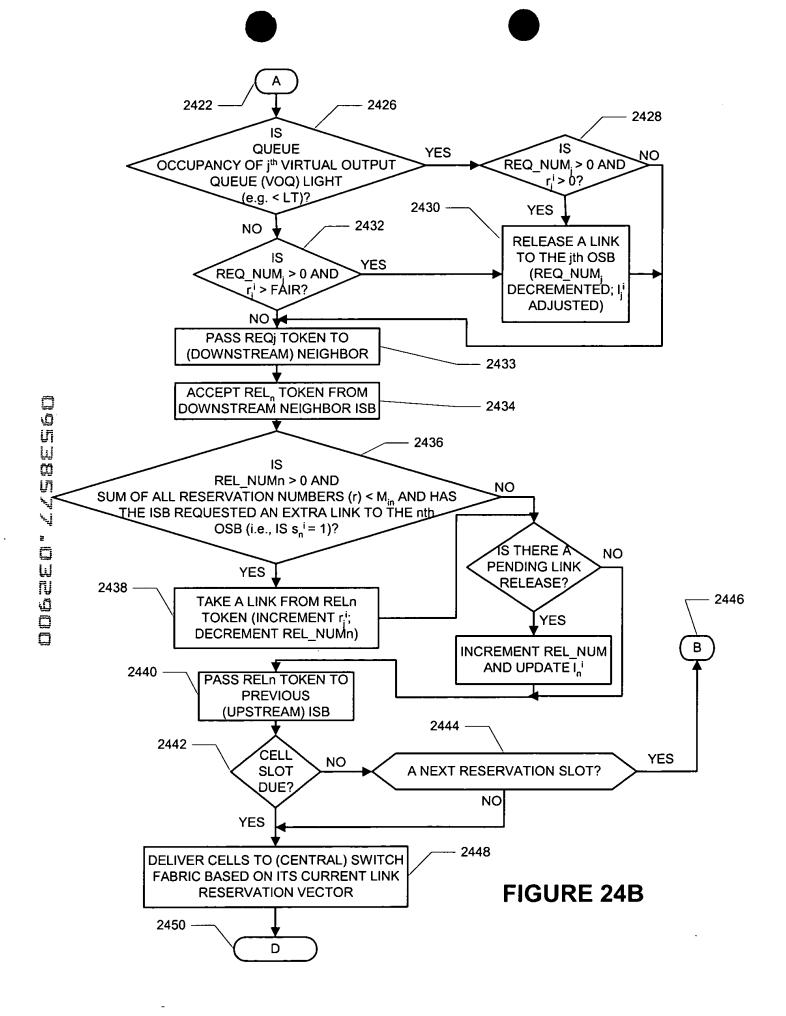


FIGURE 23





DOGBEZZ "DBEGOO

	$Q_{i} = Q_{i} = Q_{i}$	Onetic Occupancy $GT \leq G_i \leq HG$	(0.00000000000000000000000000000000000
Operation Upon		S. I. I. to the sth OCD.	the the ISB will request 1
Receiving REQ J	_	tia time to the j ODD,	extra link to the j^{th} OSB;
(QOBDLR)	if ((REQ_NUM _j > 0) and $(r_j^* > 0)$)	if $((REQ_NUM_j > 0) \text{ and } (r_j^i > Fair))$	$(r_j^i > Fair))$
	then the ISB will release a link for OSB j;	then the ISB will release a link for OSB j;	ık for OSB j ;
-	$Q_{m{u}}$ (Decino de la company) (earea, $ J_{m{u}} C f$	$\ \Omega_{t}^{\mathrm{lead}} = \Omega_{t}^{\mathrm{conpancy}}\ _{L^{2}}$ $\ LT\ \leq q_{t}^{\mathrm{lead}} \leq ^{l}HT$ (area 2 : normal loads).	Queue Occupancy (Que) HT
Operations Upon		if (REL_NUM, > 0)	if (REL_NUM _n > 0)
Receiving REL n		and $(\sum_{i=0}^{(k-1)} r_i^i < M)$	and $\left(\sum_{l=0}^{(k-1)} r_l^i < M\right)$
(Koppry)	then the ISB will release a link	and (the ISB has requested a link	then
		then	from REL , token:
		the i th ISB will take a link	
		from REL_n token;	

